SPECEILE

From S. D. Software.

SPECFILE+

Fieldless, Fast and Flexible

SPECFILE+ A Better Way to Manage Information.

Imagine a database with no "fields" to calculate or preset. Records take up exactly as much space as the information you want to store in them... no more... no less. Imagine that this space savings allows to store up to a massive 28k of information in each file — in most cases that means twice as much as you would in a normal type of filing program. Now imagine that individual records within a file can have different size, format, even layout. One record might have only a name and address. Another might have notes or memos as well. Still another might store stock control information including numeric quantities and dates.

What you're imagining is SPECFILE+, a "different & better" way to manage information!

If you give it a name or number, it will instantly search for and locate every record with that piece of information... no matter where it occurs in those records. No fixed keys, the whole record is integrated.

Can SPECFILE+ be that simple and still be powerful? YES! There are 15 lines of 32 characters for you to use as you like and it is entirely up to you where and how you store the data on the screen. Of course, the high speed, sophisticated functions of SPECFILE+ are written in machine code. But, a large part has been left in BASIC so that almost anyone can customize the program to there own personal needs. This use of BASIC is what makes SPECFILE+ the powerful and flexible program it is. You can use it as it stands - it is more than a match for other Spectrum filing programs - or you can add new features with your own lines of basic - SPECFILE+ is just so E X P A N D A B L E.

The minimum system requirement for running SPECFILE+ is:-

ZX Spectrum - 48k/128K/+2
Fitted with either a DISCiPLE or PLUS D interface
and a Single Disc Drive.

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SPECFILE+

INSTRUCTION MANUAL

PROVISIONAL ISSUE.

How to Make a SPECFILE+ Working Disc.

What follows is a simple procedure for making a "Work Disc" that will automatically load SPECFILE+ whenever you boot your disc. SPECFILE+.

Your SPECFILE+ master disc contains the following files:-

AUTOLOAD, program to load SPECFILE+
SPECFILE+, the Basic portion of the program
SPECFILE_C, the machine code part of the program
README, this is a file that may contain details of amendments
to this manual. Load it as you would a basic program.
If the file is not on the disc it means there have been no changes.

Format a new disc and put your DOS system file on it then copy the files from your SPECFILE+ master disc to the new disc in the normal way.

Put your master disc in a very safe place.

You can make as many working copies of SPECFILE+ as you like, but please remember the program is copyright material and is therefore protected by British and international law - YOU MUST NOT GIVE OR SELL COPIES OF THE PROGRAM TO ANYONE ELSE. If you ever sell, or in any other way dispose of, your original copy of SPECFILE+ then you must erase <u>ALL</u> working copies in your possession.

Running SPECFILE+

Any time you want to use SPECFILE+, just switch on your Spectrum (use 48k mode on a 128K or +2 Spectrum), put your work disc in drive 1 and boot your computer by typing RUN and pressing ENTER. The program will ask you if you want to Create a new file or Load an existing one from disc. If you already have a file on disc that contains information you want to use then press L. SPECFILE+ will catalogue the disc and ask you for the name of the file you want to load - for more details of file loading see the LOAD command.

If you want to create a new file press C and then you will be asked for a name for the file. This can be upto 8 characters long.

THE SPECFILE+ MAIN MENU

Once SPECFILE+ has finished loading, the screen clears and a new display comes on the screen which is called the SPECFILE+ MAIN MENU. Think of the Main Menu as being the master control. From the Main menu, you can add records, enter search commands, or go off to execute one of the special functions provided.

The Main Menu is divided into three main areas: the "Status Window" at the top, a list of "Command Options" appears in the middle, and at the bottom of the screen, you see the words "Search / Command?" followed by the normal Spectrum INPUT cursor.

When you enter various commands from the keyboard, the lower part of the screen is used to display your input. Whenever you see the Main Menu, the computer is waiting for you to tell it what to do or what you want it to search for. To enter one of SPECFILE+'s many commands, just type the command word. For example, to add a record, type "ADD" and press ENTER. Not all of the commands are shown on the Main Menu, just the ones you will use the most.

Use all upper case letters when you enter one of the command options. "add" will not work the same as "ADD" it will be misinterpreted as a "Search Key", SPECFILE+ will scan the records it stores for matches to what you typed.

SUMMARY OF SPECFILE+ COMMAND OPTIONS

The following commands are available, remember to type them in upper case.

SORT - Enter this command to put records in alphabetical or numeric order. SPECFILE+ will ask you which record line you want it to use as the basis of the sort. Select any line from 1 to 15. If a mailing list always has a name on the 1st line of each record and a postcode on the 6th, the list can be ordered by name by telling SPECFILE+ to sort on the basis of line 1. Later, you can sort by postcode by selecting line 6. As each record is sorted it is briefly displayed and a Sort Status Line if displayed at the bottom of the screen giving a percentage of the file that has been sorted.

NAME - This command lets you assign a file name to the data you're working with. It is like sticking a label on a box of index cards which says "Recipes" or "Films". Files which are saved on the disc are written under the filename you give with this command. The TITLE may be up to 8 characters long as it is prefixed with D when the file is saved.

NEW - Start new file. In other words, clear out all data and start over with an empty file. Be careful with this command!

ADD - Here is the most important command. When you want to add a new record to your file, enter the word "ADD" when the main menu is on the screen to put SPECFILE+ in the ADD/EDIT mode (you will know you are ADDing a record because the border colour changes to green). The screen clears and the edit cursor starts blinking in the upper left corner. A new list of edit functions appears at the bottom of the screen. These functions facilitate the adding or editing of data, and are accessed by pressing the function keys as shown. The action in this mode is similar to that of a word processor. Just start typing in whatever you want to appear on your card. When you are finished typing, press STOP (Sym-Shift A) the new record into memory and return to the main menu.

SAVE - Save the data file onto the disc drive. The entire file

will be written to your disc drive and under the file name listed in the Status Window. A "D_" prefix will automatically be added.

LOAD - Load a "D_" file into memory. SPECFILE+ lists all files on the disc that start with "D_" and then asks you to enter the desired file name you wish to load (don't type the "D".

STOP - Provides a handy means to return to the Basic without having to reset the computer. Use GOTO 1 to restart the program.

FORMAT - This command sets up the layout which will be used when printing records using the \P "GROUP" function or the P option from the Display menu.

CASE - Toggles the type of search. When case is off (the default mode) then a search looks for an exact match. When case is on then searches match with both lower-case and upper-case letters.

ADDING & EDITING RECORDS

A filing program is no good unless you can put records into the program and, when you need to, edit them again later.

SPECFILE+ gives you a screen of 15 lines of 32 characters for your record. YOU CAN TYPE ALMOST ANYTHING YOU LIKE ON THIS SCREEN. Only two characters, the " and \star , should not be typed as these may cause problems within the program.

RECORD ORGANIZATION

SPECFILE+ sorts and prints by specified line numbers. So, if you have a file of records, the sort and print types of information should appear on the same lines in every record. For example, to sort a file by Town/City, all of the records in that file should have the Town or City stored on the same line. If you'd like records to be sorted in last name alphabetical order but still have them printed with the first name first, use a separate line to contain only the last name for sorting purposes.

The records are stored in the file with all the trailing spaces on a line removed. A record therefore takes up less room if you keep things left justified. For example:-

THIS	TAKES	LESS	ROOM	• • • • •	• • • • •
			THAN	THIS	LINE

Where each "." means a space.

ADD/EDIT MODE CONTROLS

Editing records is so easy with SPECFILE+, you just type what you want in much the same way as you would when using a wordprocessor package. Adding records is exactly the same as Editing, you are just given a blank record at the start instead of an existing one to edit.

Several of the Spectrums keys are used to control what goes on.

EDIT - (Sym-Shift/1) Toggles INSERT/OVER mode. Typing is

inserted between existing text, or overwrites it depending on mode. The mode is displayed at the bottom of the screen.

EXTEN MODE - (Sym-Shift/Cap-Shift) LINE INSERT. Moves all text after the cursor DOWN one line, leaving an empty line at the cursor.

TRUE VID - (Caps-Shift/3) LINE DELETE. Removes the line of text at the cursor and moves everything UP one line.

 ${\tt STOP}$ - (Sym-Shift/A) CLOSE RECORD. Exits the ADD/EDIT mode and returns you to the Main Menu.

INV VID - (Caps-Shift/4) ERASE REST. Erases all text to the right of the cursor.

STEP - (Sym-Shift/D) NEXT RECORD. File record into memory and returns to ADD/EDIT mode. If you edit a record in the middle of a search then the search will restart.

GRAPH - (Caps-Shift/9) Toggles between lists of additional functions at bottom of screen.

CAPS LOCK - (Caps-Shift/2) Toggles caps lock mode. The mode is displayed at the bottom of the screen.

FINDING YOUR RECORDS - SEARCH KEYS

Search Key Types:-

Single Key - Any word or phrase.

Multi-Key - A series of single keys (as above) which are separated by the token AND (Sym-Shift Y).

ASTERISK (*) - A special search command which displays EVERY record in the file.

After you have added a few experimental records to SPECFILE+, try entering a few Search Keys to view them on the screen. This is done very simply by typing a word, symbol, character or phrase which you know to be in the record you want to look at. When a Search Key is entered instead of one of the Command Options, SPECFILE+ begins to hunt for the first record it can find which holds a match to the word you input. Any word or part of a word can be used as a search key.

Unlike Command Options, which must be upper case, a Search Key may be typed in either lower or upper case. When 'CASE' is OFF SPECFILE+ will find a record only if it contains an EXACT match including big or little letters. When 'CASE' is ON the records will be selected irrespective of the case of the letters.

In addition, you can use the asterisk (*) to find EVERY record. This is very useful when you want to send an entire file to a printer, or when you just want to browse through your records.

The logic separator AND (Sym-shift Y) may be included in a Search Command, "Mr Brown AND London" will find any record that contains both "Mr Brown" and the word "London".

SEARCH TECHNIQUES

SPECFILE+ searches for EVERY occurrence of whatever you ask it to search for. For example. If you search for "London" in a name and address file you will find all people who live in London. but you will also find everyone who lives in London Road (or Street, terrace etc) and also anyone with London as a surname. If you were to enter addresses in the following way then there is a way round the problem.

Mr A.R.London, 34, London Avenue, Wimbledon, London. SW19 2LR.

Now, if you want to look for Mr London you enter the search key as "London," if you enter "London " you find it as in London Avenue. Using the same logic "London." will find just the city. Play around with the search command, remember the AND token, and you will soon discover how powerful SPECFILE+ is.

THE DISPLAY OPTION MENU

After you enter a Search Key, SPECFILE+ scans your records until it finds a match to your input. It then stops to display the record it has found, if any. At the bottom of the screen you'll find a new list of possible actions you may perform. This list is called the "Display Option Menu". After the display of every record found by a search, the Display Options appear so that you can tell SPECFILE+ what you want to do next. To execute one of the options, type the letter shown in the menu and press enter.

After a search finds a record, you can press just ENTER to step to the next matching record. Further searching continues until all data has been checked. When SPECFILE+ runs out of records to search, or if it finds no match, it reports "SEARCH IS COMPLETE". To view EVERY record in the file, use the asterisk (*) as a Search Command, and continue to press just ENTER after each record display. Eventually, you will reach the end of your data and the SEARCH IS COMPLETE message will appear.

You can then type "M" at any time to return you to the Main Menu or you can type in a new Search Key. All Display Menu Options are single letter commands entered in upper case, if you enter a command in lower case then it will be treated as a Search Key.

If you press "A" then you will be passed to the ADD RECORD mode, this is the same as typing "ADD" from the main menu.

Pressing "C" will COPY contents of the current (displayed) record into a new one. This is similar to ADD except ADD starts you out with a blank screen while C gives you a copy of the current record to work on.

"D" will DELETE the currently displayed record there is no request to confirm so be careful, make sure this is the record you really want to delete.

The "E" key will pass you to the EDIT mode. The current displayed record is copied into the edit buffer. For more details on editing see the ADD/EDIT section.

"M" as we have already said will take you back to the Main Menu.

"P" will PRINT current record on your printer. One copy is made as defined by the FORMAT command. You can press P as many times as you like.

Pressing the "R" will RESTART the search from the beginning of the file. This will return you to the display of the first record found and re-display everything in the same way as last time. Any EDITed records will have moved to the end of the file.

The "X" key will show MORE Display Options. It toggles between several blocks of commands and will also give details of the file being worked on.

MAIN MENU "GROUP" FUNCTIONS

SPECFILE+ can act on an entire group of records which match a search command in several different ways. All of them are accomplished by typing a Search Command to define the group of records you wish to act on. Then add the back slash (\) (Extended Mode + Symbol Shift + D) followed by the letter shown here to select the desired function. For example, to GROUP DELETE every person from London, enter the command: London\D

The following group functions are already defined, others are reserved for user extensions.

\A GROUP AMEND:- Each record that is selected as part of your search is amended by any logic you put at lines 7000 plus.

\D GROUP DELETE:- Deletes every record which matches search command.

\P GROUP PRINT:- Lprints all matching records. The subroutine starting at line 2100 is called, in the supplied version of SPECFILE+ this prints the lines of a record as defined by the FORMAT command. To print records of EVERYONE on your mailing list use: *\P

Any other letter in the range A to Z will produce an error message. Type GOTO 1 to restart the program.

The other letters are there for future expansion - both by you (see the section on Expanding SPECFILE+ below) and by us if we find new features we feel people really want.

EXPANDING SPECFILE+ - PUTTING THE + INTO SPECFILE+

Now we come to the most exciting part of SPECFILE+, the part that really puts in the PLUS. Yes its time to look at expanding SPECFILE+, adding new feature to those provide in the supplied version. Unlike other filing programs SPECFILE+ is designed to be expanded by users. No two people will have the same needs in a filing program, everyone is different, so SPECFILE+ does not limit you to the features that have been provided.

You have already encountered USER GROUP FUNCTIONS above, well these are the route to extending SPECFILE+. Functions A, D and P are predefined but all of the rest from A-Z are available for

you to use. At line 300 a calculated GOTO jumps to one of the lines in the range 8901 to 8926 i.e. one line for each letter from A to Z. Most of the lines just say GOTO ERR at the moment, as you will guess this is to prevent problems if you inadvertently use an undefined function.

The first thing to understand is that the record you are working on is stored in the array E\$(15,32). This makes the record very easy to manipulate in Basic. Let's say you don't want to print all 15 lines of the record when you use the function \P. And just for the moment let us assume that you are working with an address file that holds the name and address in the first 6 line (with the post code stored in line 6 so it can be used for sorting. Let us work on the principal that you want to print labels, neatly, with just the name and address and a ID number you have stored in the first 4 characters of line 12. The labels are 10 lines high.

- 2110 LET LINES=10 : REM size of labels
- 2120 LPRINT E\$(12,1 TO 4): REM print the ID number
- 2130 LPRINT : REM print a blank line
- 2140 LET LINES=LINES-2: REM subtract lines printed
- 2150 FOR I=1 TO 6
- 2160 IF E\$(I,1)<>" " THEN LPRINT E\$(I): LET LINES=LINES-1
 : REM if the first character is not a space then print
- 2170 NEXT I
- 2180 FOR I=1 TO LINES : LPRINT : NEXT I : REM print blank lines to fill up label.
- 2190 RETURN

Simple, you have control over what you print out, don't be afraid to experiment. You could just as easily have set up this label routine elsewhere (lines 9000 plus will always be kept free for users to insert lines of Basic) and the set up line 8912 to jump to it. It can then be accessed by \L leaving \P for normal printing.

At the start of each of the functions that are already defined you will find the command LET A=1, this tells SPECFILE+ that you want to continue (Automatically) processing records. If you set A=0 then only that one record would be dealt with. This feature could allow you to process only a selected number of records through your code before finishing, simply set A=1 until a count reaches the required number then set A=0 and that will be the last record dealt with. If at any time you want to get out of processing and return to the main menu then just use the instruction GOTO 10.

IF - AT ANY TIME - YOU BREAK INTO THE PROGRAM all you need to do is type GOTO 1 and you will be back at the main menu.

As this is only a provisional manual we have made special arrangements with Bob Brenchley at FORMAT Publications to provide telephone support for SPECFILE+ until 31st March 1992. If you have any problems or need any advice then ring him, Monday to Friday between 10.30am and 4pm on Gloucester (0452) 412572. If you are not already a FORMAT reader then ask him for details - you will find it is the best magazine on the market for Spectrum owners.

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